

P a t e n t c l a i m s

1.

A marine, flexible, integrated umbilical (for control, injection or production), which
5 umbilical (10) comprises a number of fluid flow pipes (7; 7'; 7'') and optionally electric
conductors (8; 8'), filler material between the fluid flow pipes and the possible electric
conductors, said filler material comprises several inner and outer channel elements (2, 3,
4; 6, 9; 6', 9') being twisted about the longitudinal axis of the umbilical and assembled
such that they form channels (11; 11'; 11'') for receipt of the fluid flow pipes and the
10 possible electric conductors respectively, said pipes and conductors being axially free
movable within the channels, and an outer sheath (1; 1'; 1'') of suitable material,
characterized in that an armouring and weight adding band (B) is wrapped around the
filler material and is laid between the filler material and the outer sheath (1; 1'; 1'') in the
finished umbilical (10).

15

2.

A marine, flexible, integrated umbilical according to claim 1, **characterized in that** the
armouring and weight adding band (B) is made of a metallic material, such as a band of
steel.

20

3.

A marine, flexible, integrated umbilical according to claim 1 or 2, **characterized in**
that the armouring and weight adding band (B) is cross laid around the filler material,
optionally in several layers.

25

4.

A marine, flexible, integrated umbilical according to claim 1,2 or 3, **characterized in**
that the armouring and weight adding band (B) has a width in the order of 40-60mm
and thickness in the order of 0,6-1,0mm.

30